

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Hidenobu HAMADA :  
Serial No. NEW : **Attn: APPLICATION BRANCH**  
Filed November 19, 2003 : Attorney Docket No. 2003\_1676A  
OPTICAL DEMULTIPLEXER, OPTICAL  
MULTI-/DEMULTIPLEXER, AND OPTICAL  
DEVICE

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicant requests consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. \_\_\_\_\_.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing date of the first Office Action on the merits,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

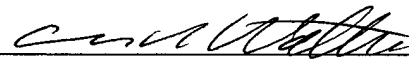
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☒ the concise explanation contained in the specification of the present application at pages 2-5 and 9,
  - d. ☒ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Hidenobu HAMADA

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November 19, 2003

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: November 19, 2003

ATTY DOCKET NO.  
2003\_1676ASERIAL NO.  
NEWAPPLICANT  
Hidenobu HAMADAFILING DATE  
November 19, 2003

GROUP

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF<br>APPROPRIATE |
|----------------------|----|--------------------|------|------|-------|----------|-------------------------------|
|                      | AA |                    |      |      |       |          |                               |
|                      | AB |                    |      |      |       |          |                               |
|                      | AC |                    |      |      |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION<br>YES NO |
|--|----|--------------------|---------|---------|-------|----------|-----------------------|
|  | AD | 63-33707           | 2/1988  | JP      |       |          |                       |
|  | AE | 2-244105           | 9/1990  | JP      |       |          |                       |
|  | AF | 2002-286952        | 10/2002 | JP      |       |          |                       |
|  | AG | 95/12828           | 5/1995  | WO      |       |          | Abstract              |
|  | AH | 8-201648           | 8/1996  | JP      |       |          |                       |
|  | AI | 11-109149          | 4/1999  | JP      |       |          | Abstract              |
|  | AJ |                    |         |         |       |          |                       |

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |    |  |
|--|----|--|
|  | AK | F. Rottmann, A. Neyer, W. Mevenkamp, and E. Voges, "Integrated-Optic Wavelength Multiplexers on Lithium Niobate Based on Two-Mode Interference", Journal of Lightwave Technology, Vol. 6, No. 6, June 1988, pp. 946-953                      |
|  | AL | M. R. Paiam, C. F. Janz, R. I. MacDonald, J. N. Broughton, "Compact Planar 980/1550-nm Wavelength Multi-Demultiplexer Based on Multimode Interference", IEEE Photonics Technology Letters, Vol. 7, No. 10, October 1995, pp. 1180-1183       |
|  | AM | K. C. Lin and W. Y. Lee, "Guided-wave 1.3/1.55 $\mu$ m wavelength division multiplexer based on multimode interference", IEEE Electronics Letters, Vol. 32, No. 14, July 1996, pp. 1259-1261   |
|  | AN | Baojun Li, Guozheng Li, Enke Liu, Zuimin Jiang, Jie Qin, and Xun Wang, "Low-Loss 1 x 2 Multimode Interference Wavelength Demultiplexer in Silicon-Germanium Alloy", IEEE Photonics Technology Letters, Vol. 11, No. 5, May 1999, pp. 575-577 |
|  | AO |  |

EXAMINER

DATE CONSIDERED